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10/727,776	12/04/2003	Rajendra Sureka	JP920030202US1	7071

7590 05/12/2008  
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EXAMINER
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SHIN, MIN

ART UNIT	PAPER NUMBER
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3688

MAIL DATE	DELIVERY MODE
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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/727,776	<b>Applicant(s)</b> SUREKA ET AL.	
	<b>Examiner</b> Min Shin	<b>Art Unit</b> 3688	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 3/17/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/4/2004</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This Office Action is in response to the Preliminary Amendment filed on 3/17/2004. Claims 1-36 are currently pending and have been considered below.
2. **Examiner's Note:** Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the **entire** reference as potentially teaching all or part of the claimed invention, as well as the content of the passage as taught by the prior art or disclosed by the Examiner.
3. It appears the Applicant is attempting to invoke 35 U.S.C. 112, 6<sup>th</sup> paragraph in Claims 25, 32, 33, 34 and 35 by using "means-plus-function" language, such as "means for presenting", "means for recording", "means for providing", etc. in the above claims. In order to successfully invoke the sixth paragraph, a three-prong test must be met. Namely, (1) the claim must use means-plus-function language; (2) the claim itself must not provided structural limitations to the means-plus-function language; and (3) the specification must recite explicit physical structural limitations for the means-plus-function language in the claim. While the above claims pass the first two prongs of the three prong test, they do not pass the third prong. There is no explicit recitation in the specification of any physical structures to perform the functions of the means-plus-

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function limitations in the claims. The only “structure” for performing the functions in the above claims appears to be computer program modules (i.e. virtual structure, not physical structure). Therefore, 35 U.S.C 112, 6<sup>th</sup> paragraph has not been successfully invoked. The Examiner will consider the means to perform the claimed functions as any means, physical or virtual, that can perform the function.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by  
Arganbright et al (US Patent Number 6,980,962)

Claim 1:

Arganbright discloses a method for learning consumer hour behavior, said method comprising the steps of:

generating a hierarchical representation of relationships formed between a an online merchant and a plurality of online parties, said representation based on referrals

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to said merchant of certain of said parties by other of said parties (see Figure 2 and 3; column 29, lines 50-59);

obtaining data relating to online transactions between said parties and said merchant; processing said data (see column 15, lines 55-67); and

predicting consumer behavior of a target party based on selected data relating to at least one party on a lower level in said hierarchical representation than said target party, said selected data selected from the processed data (see column 10, lines 54-60; see column 27, lines 1-15).

Claim 2:

Arganbright discloses the method of claim 1 as described above and further discloses wherein said re-presentation comprises a tree structure of hierarchically arranged nodes corresponding to said parties (see Figures 2 and 3).

Claim 3:

Arganbright discloses the method of claim 2 as described above and further discloses wherein each party represented by a child node in said tree structure is referred to said merchant by the party represented by a respective parent node in said tree structure (see column 29, lines 50-59).

Claim 4:

Arganbright discloses the method of claim 3 and further discloses the method comprising the further step of providing compensation to each ancestor of a party that performs a transaction with said merchant (see column 30, lines 5-9).

Claim 5:

Arganbright discloses the method of claim 4 and further discloses wherein said compensation comprises a share of the profit generated by said transaction (see column 2, lines 19-42).

Claim 6:

Arganbright discloses the method of claim 1 as described above and further discloses wherein said selected data comprises data relating to at least one of: demographics of said at least one party; acquaintances of said at least one party past transactions of said at least one party; and click stream patterns of said at least one party (see column 44, lines 56-63; column 59, lines 49-54)

Claim 7:

Arganbright discloses the method of claim 1 as described above and further discloses wherein said online transactions comprise redemption of a sales promotional tool selected from the group of sales promotional tools comprising any of: discount coupons valid for all items offered by said merchant; discount coupons valid for a

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selected group of items offered by said merchant; discount coupons valid for a particular item offered by said merchant; gift certificates; and freebies (see column 54, lines 50-56).

Claim 8:

Arganbright discloses the method of claim 1 as described above and further discloses wherein said processing step comprises applying at least one technique comprising any of: correlation analysis; collaborative filtering; and associative learning (see column 51, lines 23-34).

Claim 9:

Arganbright discloses the method of claim 1 as described above and further discloses the method comprising any of: determining pricing for items offered by said merchant; performing market segmentation of said parties; identifying preferences of said target party; identifying, sales promotional tools relevant to said target party; performing marketing targeted at an identified market segment; performing marketing targeted at said target party; and maximizing the potential success of a promotional tool (see Abstract; column 10, lines 14-21; column 30, lines 37-54).

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Claim 10:

Arganbright discloses the method of claim 1 as described above and further discloses the method comprising the further step of providing incentives to said parties to form said relationships (see column 28, lines 22-34).

Claim 11:

Araganbright discloses a method for learning consumer behavior, said method comprising the steps of:

offering a shared business opportunity with a an online merchant to selected online parties (see column 59, lines 55-66);

enabling parent parties that have accepted said shared business opportunity to offer a shared business opportunity to selected child parties (see column 33, lines 35-64);

compensating each ancestor of one of said selected child parties in response to an online transaction between said child party and said merchant (see column 30, lines 5-9); and

predicting consumer behavior of a target party based on consumer behavior of at least one descendant party of said target party (see column 10, lines 54-60; see column 27, lines 1-15).

Claim 12:

Arganbright discloses the method of claim 11 as above and further discloses a method comprising the step of providing incentive to said parties to accept said shared business opportunity (see column 28, lines 22-34).

Claim 13:

Arganbright discloses a system for learning consumer behavior, said system comprising: at least one communications interface operable for transmitting and receiving data;

a memory unit operable for storing data and instructions to be performed by a processing unit; and a processing unit coupled to said at least one communications interface and said memory unit, said processing unit programmed to (see column 3, lines 17-30):

generate a hierarchical representation of relationships formed between an online merchant and a plurality of parties, said representation indicative of referrals to said merchant of certain of said parties by other of said parties;

obtain data relating to online transactions between said parties and said merchant; process said data (see Figure 2 and 3; column 29, lines 50-59); and

predict consumer behavior of a target party based on selected data relating to at least one party on a lower level in said hierarchical representation than said target party, said selected data selected from the processed data (see column 10, lines 54-60; see column 27, lines 1-15).

Claim 14:

Arganbright discloses the system of claim 13 as described above and further discloses wherein said representation comprises a tree structure of hierarchically arranged nodes corresponding to said parties (see Figures 2 and 3).

Claim 15:

Arganbright discloses the system of claim 14 as described above and further discloses wherein each party represented by a child node in said tree structure is referred to said merchant by the party represented by a respective parent node in said tree structure (see column 29, lines 50-59).

Claim 16:

Arganbright discloses the system of claim 15 as described above and further discloses wherein said processing unit is further programmed to determine a compensation for each ancestor of a party that performs a transaction with said merchant (see column 30, lines 5-9).

Claim 17:

Arganbright discloses the system of claim 16 as described above and further discloses wherein said compensation comprises a share of profit generated by said transaction (see column 2, lines 19-42).

Claim 18:

Arganbright discloses the system of claim 13 as described above and further discloses wherein [said selected data comprises] at least one of: demographics of said at least one party; acquaintances of said at least one party; past transactions of said at least one party; and clickstream patterns of said at least one party (see column 44, lines 56-63; column 59, lines 49-54). *Examiner asks the applicant to check the language of this claim for errors phrases between [...] are added as a suggestion for the correction.*

Claim 19:

Arganbright discloses the system of claim 13 as described above and further discloses wherein said online transactions comprise redemption of a sales promotional tool selected from the group of sales promotional tools comprising any of: discount coupons valid for all items offered by said merchant; discount coupons valid for a selected group of items offered by said merchant; discount coupons valid for a particular item offered by said merchant; gift certificates; and freebies (see column 54, lines 50-56).

Claim 20:

Arganbright discloses the system of claim 13 as described above and further discloses wherein said online transactions comprise redemption of a sales promotional

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tool selected from sales promotional tools comprising of: correlation analysis; collaborative filtering; and associative learning (see column 51, lines 23-34).

Claim 21:

Arganbright discloses the system of claim 14 as described above and further discloses wherein the system comprises any of: determine pricing for items offered by said merchant; perform market segmentation of said parties; identify preferences of said target party; identify sales promotional tools relevant to said target party; perform marketing targeted at an identified market segment; perform marketing targeted at said target party; and maximize the potential success of a promotional tool (see Abstract; column 10, lines 14-21; column 30, lines 37-54).

Claim 22:

Arganbright discloses the system of claim 13 as described above and further discloses wherein said processing unit is further programmed to offer an incentive to said parties to form said relationships (see column 28, lines 22-34).

Claim 23:

Arganbright discloses a system for learning consumer behavior, comprising:  
at least one communications interface operable for transmitting and receiving data;

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a memory unit operable for storing data and instructions to be performed by a processing unit; and a processing unit coupled to said at least one communications interface and said memory unit, said processing unit programmed to (see column 3, lines 17-30):

offer a shared business opportunity with a an online merchant to selected online parties (see column 59, lines 55-66);

enable parent parties that have accepted said shared business opportunity to offer a shared business opportunity to selected child parties (see column 33, lines 35-64);

compensate each ancestor of one of said selected child parties in response to an online transaction between said child party and said merchant (see column 30, lines 5-9); and

predict consumer behavior of a target party based on consumer behavior of at least one descendant party of said target party (see column 10, lines 54-60; see column 27, lines 1-15).

Claim 24:

Arganbright discloses the system of claim 23 as described above and further discloses wherein processing unit is further programmed to offer an incentive to said parties to accept said shared business opportunity (see column 28, lines 22-34).

Claim 25:

Arganbright discloses a computer program product comprising a computer readable medium comprising a computer program recorded therein for learning consumer behavior, said computer program product comprising:

computer program code means for generating a hierarchical representation of relationships formed between an online merchant and a plurality of online parties, said representation based on referrals to said merchant of certain of said parties by other of said parties (see Figure 2 and 3; column 29, lines 50-59);

computer program code means for obtaining data relating to online transactions between said parties and said merchant; computer program code means for processing said data (see column 15, lines 55-67); and

computer program code means for predicting consumer behavior of a target party based on selected data relating to at least one party on a lower level in said hierarchical representation than said target party, said selected data selected from said the processed data (see column 10, lines 54-60; see column 27, lines 1-15).

Claim 26:

Arganbright discloses the computer program product of claim 25 as described above and further discloses wherein said representation comprises a tree structure of hierarchically arranged nodes corresponding to said parties (see Figures 2 and 3).

Claim 27:

Arganbright discloses the computer program product of claim 26 as described above and further discloses wherein each party represented by a child node in said tree structure is referred to said merchant by the party represented by a respective parent node in said tree structure (see column 29, lines 50-59).

Claim 28:

Arganbright discloses the computer program product of claim 27 as described above and further discloses comprising computer program code means for determining compensation for each ancestor of a party that performs a transaction with said merchant (see column 30, lines 5-9).

Claim 29:

Arganbright discloses the computer program product of claim 25 as described above and further discloses wherein said compensation comprises a share of profit generated by said transaction (see column 2, lines 19-42).

Claim 30:

Arganbright discloses the computer program product of claim 25 as described above and further discloses wherein said selected data comprises data relating to at least one of: demographics of said at least one party; acquaintances of said at least one

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party; past transactions of said at least one party; and clickstream patterns of said at least one party (see column 44, lines 56-63; column 59, lines 49-54).

Claim 31:

Arganbright discloses the computer program product of claim 25 as described above and further discloses wherein said online transactions comprise redemption of a sales promotional tool selected from promotional tools comprising, one of: discount coupons valid for all items offered by said merchant; discount coupons valid for a selected group of items offered by said merchant; discount coupons valid for a particular item offered by said merchant; gift certificates; and freebies (see column 54, lines 50-56).

Claim 32

Arganbright discloses the computer program product of claim 25 as described above and further discloses wherein said processing step comprises applying at least one technique comprising any of: computer program code means for correlation analysis; computer program code means for collaborative filtering; and computer program code means for associative learning (see column 51, lines 23-34).

Claim 33:

Arganbright discloses the computer program product of claim 25 as described above and further discloses comprising any of:

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computer program code means for determining pricing for items offered by said merchant; computer program code means for performing market segmentation of said parties; computer program code means for identifying preferences of said target party; computer program code means for identifying sales promotional tools relevant to said target party; computer program code means for performing marketing targeted at an identified market segment; computer program code means for performing marketing targeted at said target party; and computer program code means for maximizing the potential success of a promotional tool (see Abstract; column 10, lines 14-21; column 30, lines 37-54).

Claim 34:

Arganbright discloses the computer program product of claim 25 as described above and further discloses comprising computer program code means for providing incentives to said parties to form said relationships (see column 28, lines 22-34).

Claim 35:

Arganbright discloses a computer program product comprising a computer readable medium comprising a computer program recorded therein for learning consumer behavior, said computer program product comprising:

computer program code means for offering a shared business opportunity with an online merchant to selected online parties (see column 59, lines 55-66);

computer program code means for enabling parent parties that have accepted said shared business opportunity to offer a shared business opportunity to selected child parties (see column 33, lines 35-64);

computer program code means for compensating each ancestor of one of said selected child parties in response to an online transaction between said child party and said merchant (see column 30, lines 5-9); and

computer program code means for predicting consumer behavior of a target party based on consumer behavior of at least one descendant party of said target party (see column 10, lines 54-60; see column 27, lines 1-15).

Claim 36:

Arganbright discloses computer program product of claim 25 as described above and further discloses comprising computer program code means for providing incentives to said parties to accept said shared business opportunity (see column 28, lines 22-34).

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The examiner notes that the following references included in the Applicant's information disclosure statements are also very pertinent to the invention and include many, if not all, of the claimed invention

- Miller (US PGPub 2002/0184077)

- Raffel (US PGPub 2002/0082892)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Shin whose telephone number is (571) 270-3463. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MS  
5/7/2008

/James W Myhre/  
Primary Examiner, Art Unit 3688